

What is Claimed is:

1. A method for fabricating close spaced mirror arrays on a semiconductor crystal substrate where a mask is used for etching comprising the following steps:

providing a said substrate oriented with the $\langle 100 \rangle$ surface horizontal for placement of said mask over it and having an alignment feature on the perpendicular $\langle 110 \rangle$ crystal plane;

providing a mask with perpendicular cross arms and a diamond centered on said cross arms the centers of said diamonds lying on a line offset from said $\langle 110 \rangle$ plane by 45 degrees when said mask is placed in said etching position;

doing an etch to provide an array of membranes for steerable mirrors with each mirror membrane being defined by an octagon with four sides being a vertical etch back on the $\langle 100 \rangle$ plane and the alternating other four sides being defined by a $\langle 111 \rangle$ axis seeking etch.

2. A method as in Claim 1 where said cross arms define the $\langle 111 \rangle$ etch planes and said diamonds the lateral undercut $\langle 100 \rangle$ planes.

3. A method as in claim 1 where said etch uses potassium hydroxide (KOH) as an etchant.